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The U.S. Navy as Joint Forces Air Component Commander (JFACC) Smooth Sailing or Rough Seas

By

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A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my personal view and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Michael D. Moore

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CHAPTER I

INTRODUCTION

Throughout history military commanders have struggled with the command, control and coordination of their available assets in the fog of war. Although many commanders have clearly had the military advantage during battle, the lack of control of capable assets or poor coordination of those assets has been the deciding factor between victory or defeat. The advent of tactical aircraft added another dimension to already complicated battlefield command and control problem for the military commander to contend with. In today's world of high technology weaponry, multiservice or multinational forces involved together in combat, the employment of component commanders to harness the

potential of available assets in an attempt to achieve strategic objectives has become a reality. It is still unclear as to whether or not we have achieved a state of interoperability which would allow any service to assume the role of a Joint Forces Air Component Commander. This paper will take an in-depth look at the possibilities of the U.S. Navy assuming JFACC.

BACKGROUND

Since the introduction of aircraft into the air/land battle during World War I, the integration of tactical air assets into the "big picture" has been a difficult dilemma. The air war of World War I was almost a completely separate war from the ground battle below. It was air corp. versus air corp. Other than occasional strafing missions, reconnaissance aircraft were the only link to ground forces. Bomber technology had not yet been invented which would unite the air/ground campaign towards a common military goal. But almost every nation recognized the potential. The race to develop tactical aircraft was on.

Between World War I and World War II every major nation rushed to develop aircraft and tactics to better their war fighting capabilities. The Nazi regime of Germany developed the integrated concept of Blitzkrieg in which small tactical bombers

directly supported armor columns for swift decisive thrusts into enemy lines. The United States had also achieved many technological advances for both land and sea based tactical aircraft. Early in the war the allies were fighting three different battles; air, land and sea. It was not until after several hard learned lessons were written in blood in North Africa that the Allies, particularly the U.S., realized the command, control and coordination of air assets was a must to achieve common strategic or tactical objectives. Later in European campaigns the Allies were able to link aircraft with ground troops, via radio, to direct the aerial support. This proved to be invaluable. Air superiority became a must for amphibious operations, thus the integration became stronger and stronger. Strategic bombing or the bombing of the enemies industrial base was also attempted with varying success. Many different tactics and concepts were tested during World War II by both the Allies and the Axis powers. One of the major lessons learned was that all available air assets, coalition assets included, needed to have a common direction to ensure unity of effort. At the end of World War II the United States Armed Forces emerged with three strong air components; the U. S. Air Force, the U.S. Navy and the U.S.M.C. air component. Each component felt that it had a separate but important mission.

USAF felt close ties to the Army and strategic bombing. The Navy felt it should support the Army and Naval operations. The Marines felt they should support naval operations and the Marine Corps. ground operations. Each component began going their separate ways.

By the Korean conflict each service had forgotten the lessons learned from World War II. Once again it was a struggle to harness or coordinate a joint air campaign. Communication between the fleet and shore based units led to the establishment of a Joint Operations Center (JOC) in hopes of coordinating the Army, Air Force and Naval assets.[1] Little was accomplished in the joint interoperability arena.

During the Vietnam conflict the U.S. Armed Forces worked in a coordinated manner in the sense that the services were deconflicted as not to interfere with each others air campaign. Each service carried out their own campaign with little or no joint interaction.

During the post-Vietnam years several operations illustrated the need to drastically improve joint interoperability. The first disaster was 'Desert One'. During this operation command and control were taken to an all time high....the White House. This took the military commander out of the loop and was replaced by extremely high ranking elected officials. Joint coordination

was poor and the lack of understanding of each services' capabilities/limitations became a destructive force. The operation was a failure and caused the United States considerable international embarrassment. Next came 'Urgent Fury' in Grenada. Although a success, the operation again illustrated the lack of inter-service communication. This led to poor asset coordination as well as a lack of situational awareness of all forces involved. Shortly after 'Urgent Fury' came 'El Dorado Canyon'. During this operation the only inter-service coordination required between USAF and USN was the timing problem to deconflict the strike packages and USN SEAD efforts. Operation 'Just Cause' showed a marked improvement over the other recent operations. These improvements were partly due to U.S. forces stationed in Panama with a working communication system and time to rehearse the operation in country. The complicated plan was carried out with minimal difficulties. 'Desert Shield/Storm' came next.

To harness the combined air power of fourteen separate countries located throughout a vast theatre of operations to carry out the designated responsibilities of planning, coordination, allocation and tasking many lessons were learned. During the course of this paper the operational impact of the U.S. Navy being designated JFACC will be discussed at length

incorporating many of the lessons learned during Operation Desert Shield/Storm.

CHAPTER II

JFACC DEFINED

The joint force air component commander is defined by JCS Pub 3-01.2 as:

> "The joint force air component commander derives his authority from the joint force commander who has the authority to exercise operational control, assign missions, direct coordination among his subordinate commanders, redirect and organize his forces to ensure unity of effort in the accomplishment of his overall mission. The joint force commander will normally designate a joint force air component commander. The joint force air component commander's responsibilities will be assigned by the joint force commander (normally these would include, but not be limited to, planning, coordination, allocation and tasking based on the joint force commander's apportionment decision.) Using the joint force commander's guidance and authority, and in coordination with other service component commanders and other assigned or supporting commanders, the joint force air component commander will recommend to the joint force commander apportionment of air sorties to various missions or geographic areas."[1]

After defining JFACC, the need to determine which service will be designated JFACC arises. JCS Pub 3-01.2 further stipulates, under command, control, coordination and communication, that:

> "The joint force air component commander will be the service component commander who has the preponderance of air assets to be used and the ability to assume that responsibility."[2]

CHAPTER III

THE U.S. NAVY AS JOINT FORCE AIR COMPONENT COMMANDER

After JCS defined the responsibilities of JFACC and decided that the component commander with the preponderance of air assets should be the JFACC, one would ask---why should the Navy be designated JFACC when clearly USAF has more air assets and has proven (in combat) that they have the ability to assume that responsibility? The JFACC concept has only been executed once during Operation Desert Shield/Storm. The scenario of the operation lent itself to USAF being JFACC. We can not safely say that in the ever changing world structure that the next conflict scenario will resemble Desert Storm. It is easy to foresee a scenario that the United States Navy will have to assume JFACC simply by geographic location and lack of friendly neighboring countries in which to base USAF air assets. Quite possibly USAF assets will scatter throughout a theatre in friendly countries or islands and will have to fly considerable distances each sortie to support the joint war effort. In this scenario the U.S. Navy would have the preponderance of air assets (afloat) but does the U.S. Navy have the ability to assume the responsibility of JFACC. To better understand the Navy's abilities to be JFACC a close examination of JFACC responsibilities is required to reference against U.S. Navy capabilities and limitations.

CHAPTER IV

PLANNING

The first designated responsibility of a Joint Forces Air Component Commander is planning. To plan the JFACC needs a clearly defined military objective or set of objectives. If the objective is a single air strike of reciprocity or a political signal, Naval air assets could plan and execute the air strike to meet the objective with minimal interservice participation.

On the other hand, if the objective called for an amphibious task force (ATF) landing followed or preceded by a multiservice air campaign the planning becomes much more complicated. To execute an air campaign in the multiservice and/or coalition forces environment, the JFACC would require a representative from each airframe to be employed and a representative of each coalition force. These representatives are required to give the JFACC an understanding of each airframe's capabilities, limitations and requirements. To illustrate this point a Naval JFACC, with a background in naval aviation, would understand naval capabilities but have little knowledge of the capabilities, limitations and fuel requirements for a F-117 or a F-15E. This representation ensures the proper employment of assets and leads to the proper economy of force.

The airframe representatives would also need to serve as the JFACC strike cell representatives which would plan (targeteer) the types of targets needed to achieve the military objective of the air campaign.

To aid the targeteering effort of the JFACC staff, a Joint Intelligence Center (JIC) detachment would also need to be embarked. As seen in Desert Storm/Shield, the amount of intelligence required to support a large air campaign is tremendous. The function of the JIC detachment would be the coordination of all intelligence efforts in support of the decisions made by the JFACC staff.

Currently, there is no plan or joint coordination within the U.S. Armed Forces that dictates how the staffing of JFACC will be accomplished. During Desert Storm/Shield, the multiservice/coalition representation problem was resolved ad hoc. The luxury of the added time of Desert Shield allowed the coalition JFACC to develop the rent-a-staff program. Airframe representation was accomplished through CENTAF and NAVCENT. Many representatives had minimal previous exposure to the Air Tasking Order (ATO) concept much less targeteering.

Once the JFACC staff and JIC detachment are assembled, the problem of berthing arises. Can a U.S. naval vessel already staffed with a wartime compliment of personnel accommodate one

hundred fifty to two hundred excess personnel? Does a modern carrier have enough working spaces required for the JFACC staff and an additional intelligence center?

Once the intelligence is compiled and targeteering complete, the next hurdle to be overcome is the building of the Air Tasking Order (ATO). The U.S. Navy currently does not have a system on which to build an ATO. The formatting of a computer would seem to be the simple solution but due to the data storage problem it would easily exceed the capability of available systems in the fleet. This solution is also extremely man hour intensive. The ATO process needs to be more responsive to allow aircrew planning time for their specific mission.

USAF currently uses a system called Computer Assisted Force Management System (CAFMS) to build ATO's. The main problem with this system is that it is organic to USAF only. Neither the U.S. Navy or U.S. Marine Corp. are CAFMS compatible. One benefit of the system is that it is semi-user friendly and allows real time communication between receiving units and the ATO originator. The system also permits the passage of information contained in the threat data base (if available) that corresponds to the area of assigned missions on the ATO. CAFMS cannot be considered a cure-all for the Air Tasking Order but it is currently the only system which can attempt to tackle this part of the planning problem which faces the JFACC.

The next obstacle in the planning matrix is the transmission of the Air Tasking Order and supplemental intelligence associated with each mission. The U.S. Navy used the Autodin system for reception of ATO's. During Desert Storm, Naval air units were hampered by the late arrival of the ATO via Autodin. The delay was caused by the backup of message traffic at all precedence levels. Courier flights to and from Riyadh, S.A. were flown daily by both the Red Sea battle groups and Arabian Gulf battle groups. In a hostile air combat environment courier flights may not be possible. Another option is using a commercial IMARSAT telephone patches using STU-III phones and PC modems to transmit the ATO from the afloat JFACC to communication center to be retransmitted to all participating units. This option is cost prohibitive. A similar technique was performed daily by NAVCENT Riyadh. This involved typing the pertinent information for naval units on a PC and then transmitting the ATO over a commercial telephone line, via STU-III, to a communication center and then retransmitting to the aircraft carriers. This proved to be manpower intensive and continuously arrived late due to the message backlog. The Autodin system is not responsive to the ATO process.

To transmit and receive, one must assume that emissions control (EMCON) is not a factor. The problem of the JFACC afloat

is that the platform on which he and his staff are embarked may have to cease transmitting to avoid detection by enemy naval vessels and/or aircraft.

Another issue in JFACC planning is training. Is NAVCENT going to be JFACC? If so, does the NAVCENT staff have satisfactory training in the complete ATO process to aid the JFACC staff during the ATO process? Again, these difficult questions need to be answered prior to the U.S. Navy assuming JFACC.

CHAPTER V

COORDINATION

The problem of coordination of an air campaign prior to combat seems small to the coordination dilemma that faces the JFACC once the air/land/sea battle begins. To adhere to the principles of war and tenets of the air/land battle real time communications is required between all services and coalition partners. In addition to the airframe representatives required on the JFACC staff, senior representatives of CENTAF, ARCENT and MARCENT would be required to communicate with their individual counterparts ashore in order to keep the JFACC informed of rapidly changing situations or emergent problems. These representatives would require real-time communication which is not susceptible to jamming. Two questions arise: EMCON and jamming? Another coordination factor is real-time communication with coalition partners and possibility of a language barrier.

Besides the difficulty of communications in coordination, there are several other areas which need to be discussed. The first being airspace control/coordination. A separate shop that deals specifically with airspace control/coordination problems would greatly enhance JFACC capabilities. Not only would the shop be able to reduce the workload on the command center but

could rapidly resolve any conflicts that might arise concerning return to force (RTF) routes, tanker routes, and no fire zones. The second area of concern is the coordination between the JFACC and the Area Air Defense Commander (AADC). According to JCS Pub 3-01.2 the JFACC is normally delegated the AADC. The U.S. Navy Combined Warfare Commander (CWC) concept would be valuable in resolving this coordination problem. JFACC could delegate the responsibility of AADC to carrier battle group Air-Air Warfare Commander (AAW). The AADC, already embarked, could easily establish liaison with ARCENT and MARCENT to define RTF procedures, missile engagement zones (MEZ) and create a surveillance and reporting network to deconflict blue on blue situations. His knowledge of maritime air defense tactics would also benefit the combined combat effort.

Coordination between JFACC and other involved components is a must. It ensures unity of services and unity of effort. Without this coordination we could be fighting ourselves.

CHAPTER VI

ALLOCATION

In accordance with JCS Pub 3-01.2, the Joint Forces Air Component Commander will recommend to the joint force commander the apportionment of air forces to various missions or geographic areas. After joint force commander approval, the major allocation decision rests with asset location, asset capability/limitations, asset availability and transit time. The majority of the allocation issue could easily be resolved between the JFACC, senior service representatives, airframe representatives and airspace control/coordination shop. A generic strike package from each unit cold be assigned (dictated by the scenario) on a daily basis based on projected air frame availability. This technique was successfully employed during Desert Storm. One major pitfall to this is surge capability or the emergent need for an airframe to perform a specific mission on short notice. Once again real-time communications is a must.

CHAPTER VII

TASKING

The burden of tasking for the JFACC lies solely with the creation and issuance of an understandable Air Tasking Order. As mentioned earlier, this would be fairly easy if all assets were in one location but when assets are spread throughout a theatre of operations the tasking of units becomes a monumental communication problem. The major obstacle is the lack of an interoperable communication system designed specifically to create and issue large scale tasking orders in a reasonable amount of time.

CHAPTER VIII

CONCLUSIONS

Although the concept of a Joint Forces Air Component Commander is new and proved to be a viable command and control option to harness all available air assets in a theatre of operations. It has also highlighted interoperability gaps which need to be bridged.

The question of staffing JFACC and JIC are decisions which need to be made prior to the next conflict. The U.S. Navy also needs to decide on which platform to place these staffs if designated as JFACC. The berthing problem is a minor one to which there is probably no comfortable answer. The accommodation of these staffs in berthing areas and work spaces can be worked out.

Emission control can not interfere with the communications required to execute the responsibilities of JFACC. The U.S. Navy will have to assume that the enemy has the capability to locate the platform from which a cloud of communications is emanating and plan for the eventuality of an attack.

Communication interoperbility is the major obstacle which the U.S. Navy needs to overcome. Autodin does not have the responsiveness required in the ATO process. FIST does not have

the quantitative capability required for JIC nor the interoperability required between services. IMARSAT is an extremely limited asset and would probably be in constant use to meet emergent communication needs.

In summation, the U.S. Navy currently does not have the capability to assume JFACC on a large scale. If delegated to assume JFACC now, the best the U.S. Navy could put together would be a piece meal air campaign which may fall short of the objective set forth by the Joint Force Commander.

CHAPTER IX

RECOMMENDATIONS

Naval aviators, in general, are accustomed to receiving their asking from the commander of the air wing and only during joint operations such as Team Spirit are they exposed to outside tasking orders. I strongly recommend that a course be instituted to familiarize mid to senior grade naval officers in the creation and translation of Air Tasking Orders. This course could easily be incorporated into established naval aviation schools such as Navy Fighter Weapons School (Top Gun), Naval Strike Warfare Center (Strike U) and medium/light attack weapons schools (East/West). The benefit of instituting such a course would allow the U.S. Navy a wide spectrum of tactical pilots to choose from for the staffing of a naval JFACC or other joint aviation staffs. The course would also increase, at all levels of naval aviation, the ability to comprehend Air Tasking Orders. The bottom line is training. Training provides us the opportunity to prepare for how we are going to go to war, the better prepared we are (especially in the joint arena) the more combat ready we are.

The U.S. Navy needs to be delegated JFACC during major interservice operations. During these training exercises the U.S. Navy would be able to clearly identify shortcomings and

attempt to resolve the problems over time. That is to say walk before running. Once again, this training would be invaluable in the long run.

After examining the four major responsibilities of a JFACC, a common weakness is apparent. This weakness is the ability to communicate with our other Armed Forces. Communications afloat has its' own inherent limitations but with todays high technology the problem seems to be interoperability. The U.S. Navy alone cannot be singled out for this problem, it is a Department of Defense problem. Facing current budget cutbacks and the Goldwater-Nichols Act, the U.S. Armed Forces need to get onboard with the joint communication problem and develop an interoperable planning system. The system needs to be mobile so that it can be operated from the flatbed of a truck or the hangar bay of an aircraft carrier. The system also needs to be isolated from other communication systems so that the inter-communication between service components is not interrupted because of a higher priority within the system. Confronted with regional conflicts in all areas of the world with which we might become involved, it becomes imperative that shore based units and units afloat can communicate in order to unify our military goals and objectives, i.e. bombs on target ontime.

CHAPTER X

THE FUTURE

The U.S. Air force is currently developing a new planning/management system called Advance Planning System (APS) which is an upgraded Computer Assisted Force Management System (CAFMS). The U.S. Navy is now developing the Copernicus system which upgrades communication capabilities of afloat units. The problem is that while afloat units will have more capabilities, the shore units will have the software capabilities and the twain does not meet. A jointly funded program between Army, Air Force and Navy could identify individual service needs and develop a system that ties all services together via improved communication and software capabilities to take the U.S. Armed Forces into the next century.

NOTES

CHAPTER I

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